

REMARKS

Presently claims 1, 2, 4, 9, 10, and 12 to 15 are under examination. Claims 3, 5 to 8, 11 and 13 are canceled. Claim 15 is new.

In response to the Amendment submitted after final rejection, the Examiner stated that the amendment to the claims raised new issues and, further, that “the combination of the optical fiber connected to a coherent light source (claim 1) and the specific wavelength of 980 nm discussed in new claim 14 was not previously considered.”

In a phone interview with the Examiner on 7/25/5, the Examiner was only able to reiterate his comments regarding the rejections.

1. The Examiner has rejected claims 1, 8 and 12 under 35 U.S.C. §102(b) as being anticipated by Wolff, US 4,287,654, for the reasons noted in paragraph 2 and paragraph 8.

Applicant's prior traverse is incorporated by reference.

Claim 1 has been amended to indicate that the radiation is coherent and is delivered to the treatment area by one or more optical fibers. This was not shown by any reference.

To anticipate the present invention, Wolff must teach each and every element as set forth in the claims. MPEP 2131. A close reading of Wolff will confirm that the reference does not meet the “every element” requirement and thus does not anticipate the present invention. Moreover, the Examiner has not presented a factual basis or objective technical evidence to support a theory of inherency.

The Wolff reference at several locations notes that the tanning lamp as being non-coherent may be used for therapeutic purposes but does not detail any operational characteristics or benefits for such. Only for example noting that there is a medical purpose to treat psoriasis, acne and other skin irregularities or diseases with the

tanning lamps of that invention. See Col. 1, lines 51 to 53. Further, Wolff teaches the “treatment” of large areas of the body not having any skin problems solely for the purpose of tanning. Wolff further does not use optical fibers to deliver the radiation of concern.

The amended claims describe a method for treating and healing stage 1 and stage 2 wounds, therefore, the present invention is directed towards psoriasis that is still in the early stages of disease progression, i.e., when disease symptoms are limited to red bumps or scales and are not yet open sores. See Page 4, lines 2 to 3. As a chronic skin disorder with a number of different manifestations, the specific symptoms associated with the early stages of psoriasis or other early stage wounds emphasize the generic and unqualified nature of the Wolff “medical use” teachings. The applicant specifically claims in Claim 1 that the coherent radiation is directed at Stage 1 or Stage 2 wounds, in general, not a psoriasis only as noted by Wolff.

The Wolff reference is totally directed at an incoherent high intensity non-laser sources such as lamps. See Col. 11, lines 21 to 28.

The Wolff reference only discloses non-coherent light sources directed in the UV range below 315 nm. Col. 5, lines 65-66. See Col. 11, lines 21 to 28. Further, Wolff does not use optical fibers in the delivery of the radiation.

As to Claim 12, Wolff clearly does not mention any destruction of bacteria or viral bodies to stop infections.

With this amendment, this rejection of the claims is believed to be removed.

2. The Examiner has rejected claims 1, 2, 4, 6 to 8 and 12 under 35 U.S.C. §102(e) as being anticipated by Whitehurst, US 6,461,866, for the reasons noted in paragraphs 3 and 8.

Applicant’s prior traverse is incorporated by reference.

Applicant has amended Claim 1 to include therein the prior dependent claim directed at the radiation being coherent. New Claim 14 is directed at the coherent

radiation being laser radiation of a particular wavelength that was disclosed in the Examples. Further new claim 15 is combined Claims 1 and 14.

The Whitehurst reference is totally directed at an incoherent high intensity non-laser source. See Col. 1, lines 10 to 31. Whitehurst specifically notes the use of a non-laser source. The Whitehurst wavelength ranges are noted as in a range from 350 to 700 nm or from 250 to 1100 nm. No particular wavelength is noted as in the present Claims 14 and 15. Col. 3, lines 32 to 53.

Thus, unlike the present invention, Whitehurst does not teach or suggest a light source that prevents wound progression or enhances healing of stage 1 or stage 2 wounds.

With this amendment, this rejection of the claims is believed to be removed.

3. The Examiner has rejected claims 2, 4, and 6 under 35 U.S.C. §103(a) as being unpatentable over Wolff ('554) for the reasons noted in paragraphs 5 and 8.

Applicant's prior traverses are incorporated by reference.

The *prima facie* case of obviousness has not been established with respect to Wolff because the reference does not suggest, teach, or imply the motivation to combine or modify the reference teachings in order to produce the present invention. Moreover, the reference does not disclose all of the elements of the present invention as set out in the claims. In sum, the present invention is not obvious in view of Wolff because Wolff fails to suggest the desirability of using coherent radiation and optical fibers to stimulate the physical healing of stage 1 and stage 2 wounds.

Again, applicant has amended Claim 1 as noted above.

New Claim 15 is Claim 1 and Claim 14 combined to further define the invention for the application of laser radiation of 980 nm through an optical fiber for the treatment of early stage wounds.

The addition of new Claim 15 is directed at laser radiation of the 980 nm wavelength which is clearly outside the range of wavelengths preferred by Wolff. See Col. 1, lines 58 to 67. Col. 3, lines 47 to 62. Wolff notes that the source of radiation

is a non-laser source, Col. 2, lines 65 to 67, and it is therefore noncoherent. For the claimed medical applications by Wolff, it notes a wavelength range from 350 to 700 nm with a intensity of 100 mW/cm² for a bandwidth of 25 nm or less. See Col. 3, lines 47 to 53.

It is therefore respectfully asserted that Wolff teaches away from the use of a laser radiation source as is presently claimed and the wavelength range of Wolff is outside of the range as presently claimed in Claim 15.

4. The Examiner has rejected claims 5 under 35 U.S.C. §103(a) as being unpatentable over Whitehurst ('866) for the reasons noted in paragraphs 6 and 8.

Claim 5 has been canceled.

5. The Examiner has rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Whitehurst ('866) in view of Talmore (US 5,344,433) for the reasons noted in paragraph 7.

Applicant incorporates by reference prior traverses.

It is to be noted that both Whitehurst and Talmore use noncoherent light sources. Claims 9 and 10 have been changed to indicate that the radiation is coherent in the present invention, but was presented only as radiation in the prior claims.

In view of the unpredictability of tissue-light interactions and the differences between various wound types, there is no reasonable expectation of success that combining the teachings of Whitehurst and Talmore would prevent wound progression or enhance wound healing in stage 1 and/or stage 2 wounds associated with spider bites and other insect bites, bee stings, rashes, poison ivy, poison oak, acne, and eczema. Without a reasonable expectation of success, the present invention is not made obvious by Whitehurst in view of Talmore.

Again, Whitehurst uses a non-coherent light source such as a xenon arc lamp and further by filters outputs a narrow band width of about 25 nm or less around a preferably a central wavelength in the 350-700 nm range. Talmore also uses an arc lamp to output

non-coherent radiation having a wavelength range from 330 to 370 nm into a light guide, Col. 4, 5 to 10, with a power density of at least 1 mW per cm². Col. 2, line 63; whereas the present invention uses coherent light and preferably at 980 nm.

With these changes and remarks, it is believed that the disclosure is now in condition for a careful re-examination and allowance. Reconsideration is respectfully requested. An early and favorable response is earnestly solicited. Thank you.

Respectfully submitted,



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